

## EAST Search History

| Ref # | Hits | Search Query   | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|--|--|------------------|---------|------------------|
| L1    | 1617 | 382/298,299.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2008/02/13 18:05 |
| L2    | 6928 | 358/1.2,1.9,3.12,3.03.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2008/02/13 18:05 |
| L3    | 8385 | L1 or L2   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2008/02/13 18:05 |
| L4    | 19   | 3 and (shift\$3 (pixel or pel) neighbor\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH             | OFF     | 2008/02/13 18:08 |
| L5    | 16   | ("4790028"   "5319383"   "5513120"   "5701138"   "5886682"   "5937108").PN. OR ("6178272").URPN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR               | OFF     | 2008/02/13 18:14 |
| L6    | 2    | 3 and (exchang\$3 (pixel or pel) neighbor\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH             | OFF     | 2008/02/13 18:18 |
| L7    | 4    | 3 and ((exchang\$3 or swap\$4 or shuffle or interchang\$3) (pixel or pel) neighbor\$4)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH             | OFF     | 2008/02/13 18:20 |

## EAST Search History

|     |       |  |  |      |     |                  |
|-----|-------|--|--|------|-----|------------------|
| L8  | 5     | 3 and ((exchang\$3 or swap\$4 or shuffle or interchang\$3) (pixel or pel) (vector or matrix))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/13 18:25 |
| L9  | 26348 | halftone   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/13 18:41 |
| L10 | 7371  | error adj1 diffusion   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/13 18:41 |
| L11 | 2551  | L9 and L10   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/13 18:41 |
| L12 | 5     | 11 and ((exchang\$3 or swap\$4 or shuffle or interchang\$3) (pixel or pel) neighbor\$4)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/13 18:42 |
| L13 | 7     | 9 and ((exchang\$3 or swap\$4 or shuffle or interchang\$3) (pixel or pel) neighbor\$4)         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/13 18:48 |
| L14 | 3     | 11 and ((exchang\$3 or swap\$4 or shuffle or interchang\$3) (pixel or pel) (vector or matrix)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/13 18:49 |

## EAST Search History

|    |       |   |  |    |     |                  |
|----|-------|---|--|----|-----|------------------|
| S1 | 1615  | 382/298,299.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:20 |
| S2 | 6920  | 358/1.2,1.9,3.12,3.03.ccls.                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:20 |
| S3 | 8375  | S1 or S2  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:21 |
| S4 | 38    | S3 and ((pel or pixel) adj1<br>(repeat\$3 or repetition)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:25 |
| S5 | 9     | S4 and halftone   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:29 |
| S6 | 23358 | (scaling or zoom\$3) near3 (image or<br>picture)          | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:40 |
| S7 | 26324 | halftone  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:41 |

## EAST Search History

|     |       |   |  |    |     |                  |
|-----|-------|---|--|----|-----|------------------|
| S8  | 7367  | error adj1 diffusion  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:41 |
| S9  | 171   | S6 and S7 and S8  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/11 19:41 |
| S10 | 61    | ("3976982"   "4129860"   "4302776"<br>  "4503469"   "4532602"  <br>"4587621"   "4610026"   "4616268"<br>  "4636869"   "4656467"  <br>"4665551"   "4712140"   "4764975"<br>  "4829587"   "4831659"  <br>"4872064"   "4907171").PN. OR<br>("5097518").URPN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2008/02/11 19:51 |
| S11 | 4     | S10 and (threshold and shift\$3)  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2008/02/11 19:56 |
| S12 | 0     | S10 and average near3 intensit\$3   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2008/02/11 19:57 |
| S13 | 39    | S10 and resolution  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2008/02/11 19:57 |
| S14 | 23373 | (scaling or zoom\$3) near3 (image or<br>picture)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/12 09:12 |
| S15 | 26348 | halftone  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/12 09:12 |

## EAST Search History

|     |         |   |  |      |     |                  |
|-----|---------|---|--|------|-----|------------------|
| S16 | 7371    | error adj1 diffusion  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 09:12 |
| S17 | 172     | S14 and S15 and S16   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 09:12 |
| S18 | 2189827 | (average or mean)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 09:34 |
| S19 | 447     | S14 same S18  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 09:35 |
| S20 | 9       | S19 and S15 and S16   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 09:35 |
| S21 | 80436   | (average or mean)(pixel\$3 or pel or intensity or contrast) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/12 09:41 |
| S22 | 339     | S16 same S21  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/12 09:41 |

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|     |       |   |  |      |     |                  |
|-----|-------|---|--|------|-----|------------------|
| S23 | 9     | S14 and S15 and S22                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | WITH | OFF | 2008/02/12 09:41 |
| S24 | 61    | ("5363213").URPN.                                 | USPAT  | OR   | OFF | 2008/02/12 12:52 |
| S25 | 30    | S24 and (shift\$3 near3 (matrix or pixel or pel)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 12:53 |
| S26 | 23373 | (scaling or zoom\$3) near3 (image or picture)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 12:57 |
| S27 | 977   | S26 and (shift\$3 near3 (matrix or pixel or pel)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 12:57 |
| S28 | 7     | S27 and halftone and error diffusion              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | OFF | 2008/02/12 12:58 |
| S29 | 1617  | 382/298,299.ccls.                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 13:38 |
| S30 | 6928  | 358/1.2,1.9,3.12,3.03.ccls.                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2008/02/12 13:38 |

## EAST Search History

|     |      |   |  |    |     |                  |
|-----|------|---|--|----|-----|------------------|
| S31 | 8385 | S29 or S30  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/12 13:38 |
| S32 | 64   | S31 and (shift\$3 near3 (matrix))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/12 13:38 |
| S33 | 6    | ("4912668"   "5274449"   "5442399"<br>  "5572236"   "5774206"  <br>"6452969").PN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2008/02/12 14:43 |
| S34 | 2    | "20050200897"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2008/02/13 16:23 |